Alberta Environment's Response

to

the Recommendations of the Upper Elbow River Instream Objectives Working Group

November, 1999

Introduction

The Upper Elbow Instream Objectives Working Group was created to recommend instream objectives for the Upper Elbow River upstream of Glenmore Reservoir. Instream objectives will provide targets for protecting instream uses and the aquatic and riparian environments. The objectives will strike a balance between instream needs and water withdrawal and effluent discharge

In its report[1] to Alberta Environment, the Working Group made several recommendations. This document provides Alberta Environment's response to those recommendations.

Recommendation 1: In making decisions on licences, approvals, and other regulatory matters affecting the upper Elbow River, Alberta Environment should use the following instream objectives:

a. the water quality objectives listed in Table B-1 of Appendix B [of the Working Group's report]

b. the flow requirements of licensees or approval and registration holders who are downstream of a proposed activity

c. the flow to maintain fish habitat[2]

d. the flow to maintain river recreation as follows:[3]

- in Kananaskis Country and downstream to Bragg Creek
  - preferred flow for very skilled canoeists
- from Bragg Creek to Highway 22
  - preferred flow for intermediate canoeists
- from Highway 22 to Glenmore Reservoir
  - minimum flow for canoeing

e. the instream flow objectives for the Elbow River downstream of Glenmore Dam

f. the ongoing modification of instream objectives to accommodate new

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1 *Report of the Upper Elbow River Instream Objectives Working Group*, October, 1999.

2 Work during the summer of 1999 will provide better information on the fish habitat in the Elbow River and the flow and other factors needed to maintain that habitat. A fisheries inventory has been recommended for the Elbow River. Beyond the work being conducted this summer, resources are currently not available for the inventory. Efforts will continue to secure the resources necessary to complete the inventory.

3 Work beginning in the summer of 1999 will provide better information on the flow needed for river recreation.

information about flow, water quality, and the inter-relationships between them.[4]

These objectives will protect and sustain the aquatic ecosystem and the human uses of water including agriculture and industry.

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Recommendation 1 is accepted for public review.

Regarding point b of the recommendation, protection of downstream licensees and registration holders is administered according to the principle of "first in time, first in right" (section 30 of the *Water Act*). Where there are concerns that limits should be placed on the amount of water allocated in an area, then other provisions of the *Water Act* (e.g., sections 34, 35, and 53) might be appropriate.

Recommendation 2: Alberta Environment has agreed to pursue a ground water management plan with the Municipal District of Rocky View, the Municipal District of Foothills, and the Tsuu T'ina Nation. Until this ground water plan is completed, it is recommended that, for water well licence applications[5] in the Elbow River Basin, ground water should be treated as if it were surface water unless it is demonstrated that the ground water is not connected to surface water in the basin. New or additional ground water withdrawals should only be allowed if sustainable[6].

NOTE: The Municipal District of Rocky View does not support this recommendation because it believes that ground water was not within the terms of reference of the Working Group. The M.D. feels that, if this recommendation is implemented, it should only apply to water well licence applications within the 1-in-100 year floodplain.

Alberta Environment's Response

Alberta Environment recognizes that meeting instream objectives for the Elbow River depends on sustainable management of ground water. Alberta Environment requires applicants for the use of ground water to submit a report that, among

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[4] The Working Group recognizes the importance of updating instream objectives so that they reflect advances in scientific understanding. The Working Group feels that it is particularly important to ensure that the aquatic ecosystem and human uses are not compromised by the combined influence of low flows and reduced water quality.

[5] This recommendation would not affect wells for household purposes since those wells do not require a licence under the *Water Act*.

[6] In terms of ground water management, "sustainable" means that ground water withdrawals will not exceed the recharge rate of an aquifer and will not cause unacceptable reduction in the ground water contribution to surface water supply or adverse effects on licensed users and the aquatic and riparian environments.

other things, evaluates whether or not the ground water is hydraulically connected to a river, lake, or other source of surface water. If there is a hydraulic connection to surface water, then the well will be licensed as surface water. All relevant conditions that apply to both ground and surface water (including instream objectives) will be applied to the licence.

Recommendation 2 will be considered when the ground water management plan is completed. In Alberta Environment's view, there is currently insufficient scientific information to justify a change in the way ground water use in the Elbow Basin is administered. Given current water demand in the Basin, implementing this recommendation would have no practical effect on licensed water use. There are also provisions in the *Water Act* that can be used to remedy unforeseen adverse effects (e.g., sections 54 and 60).

Recommendation 3: In making decisions on licences and/or approvals for water withdrawals affecting the upper Elbow River, Alberta Environment must develop estimates of future demand for water withdrawals (including domestic use) from all municipalities and First Nations upstream and downstream from the proposed withdrawal location and consider this future demand in its decisions.

Alberta Environment's Response

Recommendation 3 is accepted for public review.

Future demand for water was considered in the planning that led to the *Water Management Policy for the South Saskatchewan River Basin*. This policy limits irrigation expansion, but does not include provisions related to future demand for other uses.

Estimates of future demand will be updated as part of the Year 2000 Review of Water Management in the South Saskatchewan River Basin. The results of the Year 2000 Review will determine how future demand will be considered in decisions. Establishing limits on water allocation would occur through special provisions in the *Water Act* (e.g., sections 34, 35, and 53), rather than through day-to-day licensing decisions.

Recommendation 4: Alberta Environment should require that standardized, written, and verifiable notification of all applications for water withdrawals, diversions, or effluent discharges from or into the upper Elbow River be sent to the Tsuu T'ina Nation and all licensees, municipalities, landowners along the river, and other directly affected groups. Alberta Environment should develop a mailing list for applicants to use.

Alberta Environment's Response

Recommendation 4 would create notification procedures that greatly exceed the legal requirements of the *Water Act* and the *Environmental Protection and Enhancement Act*. Recommendation 4 is not accepted since adopting it would create a precedent that in all likelihood would be impossible to meet.

Alberta Environment does, however, support methods to improve the opportunities for Albertans to understand and provide advice on decisions affecting the environment. At the discretion of the Director, notification of applications under the *Water Act* in the Bow River Basin is posted on Alberta Environment's website (http://www.gov.ab.ca/env/water/instreamact/). Alberta Environment is currently considering expansion of the website to include notification of applications under the *Environmental Protection and Enhancement Act*.

Recommendation 5: To ensure that the instream objectives are met, there must be an adequately funded program of data collection and analysis that will include:

a. long-term flow monitoring

b. water quality analysis

c. the engagement of qualified, experienced people to provide high quality, impartial, and defensible interpretations and conclusions.

Alberta Environment's Response

Recommendation 5 is accepted for public review.

Alberta Environment, in co-operation with the City of Calgary and the federal government, has conducted extensive data collection and analysis of flow and water quality in the Elbow River Basin. This monitoring has provided high quality, impartial, and defensible data, interpretations, and conclusions. Subject to funding priorities, it is Alberta Environment's intent to continue its monitoring program in the Basin in co-operation with other stakeholders.

Recommendation 6: In using the instream objectives and other environmental criteria, Alberta Environment's investigators and inspectors should provide a written description of their authority, citing specific legislation and/or regulation for reference, and provide written direction summarizing concerns and proposed changes required to resolve problems. This direction should be followed by a meeting with affected parties to discuss contributing factors and alternative solutions to relevant issues.

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Alberta Environment recognizes the need for clear, streamlined, and fair procedures for applying instream objectives. Alberta Environment will consider Recommendation 6 during its current review of its compliance assurance program.

Recommendation 7: The *Report of the Implementation Committee* (Appendix C [of the Working Group's report]) and the additional issues raised by Working Group members (Appendix H [of the Working Group's report]) should be referred to the Bow River Basin Water Council for consideration when the Council discusses methods for ensuring that the instream objectives are met.

Alberta Environment's Response

Recommendation 7 is accepted for public review.

Implementation of instream objectives requires the support of many jurisdictions. Alberta Environment supports discussion of implementation through the Bow River Basin Water Council since the jurisdictions within the Elbow Basin are represented on the Council.

Recommendation 8: This report should be provided to the governments, organizations, and individuals that participated on the Working Group. Once they have had a chance to familiarize themselves with its contents, the report should be made available to the public for review and comment.

Alberta Environment's Response

Recommendation 8 is accepted.